

5. (Amended) The system of claim 1, further comprising:

A2 an utterance verification processor that identifies out-of-vocabulary utterances and utterances that are poorly recognized in unconstrained input.

6. (Amended) The system of claim 1, further comprising:

a validity database that stores a numeric grammar comprising rules relating to naturals, starts, alphabets, city/country, numeric phrases and out-of-vocabulary classes; and
a string validation processor that outputs validity information based on a comparison of a sequence of digits with the numeric grammar.

9. (Amended) The system of claim 1, wherein:

the numeric understanding processor recognizing restart, city/country and miscellaneous cases in the string of digits.

A3 10. (Amended) A method, comprising the steps of:

receiving unconstrained input speech as a string of words that can include a numeric language comprising a set of digits relevant for interpreting an understanding a set of number strings; and
converting the string of words into a sequence of digits.

Please add the following new Claims:

11. (NEW) A system comprising,
- a feature extractor for receiving a speech input signal and outputting cepstral vectors representative of the speech input signal;
- speech recognition apparatus responsive to the cepstral vectors, an acoustic model data base and a language model database and producing a set of words that include a numeric language;
- a numeric understanding processor converting the strings of words and outputting a sequence of digits based on a set of rules relating to classes of phrases;
- a validation database for storing valid credit card and telephone numbers;
- a string validation processor for determining whether the sequence of digits identified in the numeric language is a valid existing credit card or telephone number; and
- an utterance processor providing a dialogue manager with a verification measure of confidence for call confirmation, repair or disambiguation
12. (NEW) A method comprising
- receiving a speech input signal and extracting cepstral vectors representative of the speech input signal;
- producing a set of words based upon the cepstral vectors, an acoustic model data base and a language model database and including a numeric language;
- converting the strings of words and outputting a sequence of digits based on a set of rules relating to classes of phrases;
- storing valid credit card and telephone numbers in a validation database

AH
count